



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1411; Directorate Identifier 2011-NM-074-AD; Amendment 39-17206; AD 2012-19-11]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737 airplanes. This AD was prompted by a report of a flightcrew not receiving an aural warning during a lack of cabin pressurization event. This AD requires incorporating design changes to improve the reliability of the cabin altitude warning system by installing a redundant cabin altitude pressure switch, replacing the aural warning module (AWM) with a new or reworked AWM, and changing certain wire bundles or connecting certain previously capped and stowed wires as necessary. For certain airplanes, this AD also requires prior or concurrent incorporation of related design changes by modifying the instrument panels, installing light assemblies, modifying the wire bundles, and installing a new circuit breaker, as necessary. We are issuing this AD to prevent the loss of cabin altitude warning, which could delay flightcrew recognition of a lack of cabin pressurization, and could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Francis Smith, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6596; fax: (425) 917-6590; email: [Francis.Smith@faa.gov](mailto:Francis.Smith@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the

Federal Register on December 30, 2011 (76 FR 82207). That NPRM proposed to require incorporating design changes to improve the reliability of the cabin altitude warning system by requiring installation of a redundant switch of the cabin altitude pressure, replacing the AWM with a new or reworked AWM, changing certain wire bundles, and connecting certain previously capped and stowed wires, as necessary. For certain airplanes, that NPRM also proposed to require modifying the instrument panels, installing light assemblies, modifying the wire bundles, and installing a new circuit breaker, as necessary.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (76 FR 82207, December 30, 2011) and the FAA's response to each comment.

### **Support for NPRM (76 FR 82207, December 30, 2011)**

Air Line Pilot's Association International supported the intent and the language of the NPRM (76 FR 82207, December 30, 2011). Europe Airpost stated it has no objection to the NPRM as proposed for Model 737-700 airplanes. American Airlines (AAL) stated it has no objections to the NPRM as proposed and finds the proposed compliance time to be acceptable.

### **Request to Use the Latest Service Information**

Delta (DAL), AAL, and The Boeing Company requested that the proposed AD (76 FR 82207, December 30, 2011) incorporate "Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012," instead of Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010. Boeing stated that Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012, incorporates changes to fix errors in the airplane maintenance manual, connection pin contacts, one splice, and one wire that had been discovered by an operator

attempting to incorporate the service information. Boeing stated that if Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, is required, the operators affected by the errors in that service bulletin will require alternative methods of compliance (AMOCs) in order to comply with the proposed AD.

In addition, Boeing and US Airways requested that the proposed AD (76 FR 82207, December 30, 2011) incorporate Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012. Boeing stated that this revised service information incorporates changes from an engineering validation that affects all identified airplane groups and revises the engineering for airplanes with cold-bonded skins. Boeing stated that Boeing Special Attention Service Bulletin 737-21-1164, dated February 10, 2011, cannot be incorporated as written due to erroneous installation steps for the pressure switch location and erroneous operational test instructions. US Airways noted that errors with conflicting steps in Boeing Special Attention Service Bulletin 737-21-1164, dated February 10, 2011, involve circuit breaker operation.

We agree with the commenters' requests to reference the latest service information for the reasons provided by the commenters. We have revised this AD by referencing Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012; and Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012; throughout the AD. We have also given credit for actions done before the effective date of this AD in accordance with Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010.

#### **Request to Clarify or Delete Service Information**

Boeing requested that we either delete or clarify references in the preamble and paragraph (i) ("Credit for Actions Accomplished in Accordance with Previous Service Information") of the NPRM (76 FR 82207, December 30, 2011) to Boeing Alert Service

Bulletin 737-31A1325, dated January 11, 2010, and Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; as well as the supporting BAE Systems service information. Boeing stated a concern that the references to all of this service information will cause confusion regarding the concurrent requirements and compliance times.

Boeing also stated that AD 2011-03-14, Amendment 39-16598 (76 FR 6529, February 7, 2011), already mandates incorporation of Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010, and also establishes the compliance time. Boeing added that another existing NPRM, Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011), proposes to mandate Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010, and it also establishes the compliance times.

Boeing stated its concern that the proposed AD (76 FR 82207, December 30, 2011) might inadvertently require operators to incorporate Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012; and Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010; at the same time—instead of in the correct order.

We agree with Boeing's request to clarify or delete certain service information in this final rule to avoid confusion.

Notes 1 and 2 of the NPRM (76 FR 82207, December 30, 2011) referenced the supporting BAE Systems service information; therefore, we have removed those notes from this final rule to avoid confusion.

It should be noted that since the issuance of the NPRM (76 FR 82207, December 30, 2011), we have reviewed Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012, which clarifies certain actions and figures. We have revised paragraph (h) of this AD to reference this latest revision of the service information.

We have also revised paragraph (i) of the NPRM (76 FR 82207, December 30, 2011), which gave credit for Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010. Paragraph (i)(1) of this final rule provides credit for Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010. We have added paragraph (i)(2) to this final rule to give credit for Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010; however, such credit only applies to Group 1 airplanes identified in that service information, except for Groups 24, 25, and 27 through 33 airplanes (as identified in Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012). Paragraphs (i)(3) and (i)(4) of this final rule to provide credit for Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011, but only for the airplanes identified in those paragraphs.

We provide the following clarifications for references in this final rule to Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010; and Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; as applicable.

If an operator decides to comply with the actions in Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012; and Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012; within the 72-month compliance time specified in this AD, then prior to or concurrently with those actions, the operator also must accomplish the concurrent requirements in Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010, or Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012, as applicable.

However, we note that AD 2011-03-14, Amendment 39-16598 (76 FR 6529, February 7, 2011), requires accomplishment of Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010, within 36 months after the effective date of that

AD. In addition, NPRM Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011) also specifies 36 months as the compliance time for accomplishment of Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010. Therefore, if an operator waits until the end of the 72-month compliance time specified in paragraph (g) this AD to accomplish the concurrent service information specified in this AD—i.e., Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010; and Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012—then that operator would be out of compliance with the other AD actions. Therefore, the order of these AD actions is acceptable.

#### **Request to Revise Unsafe Condition**

Boeing requested that paragraph (e) of the NPRM (76 FR 82207, December 30, 2011) be revised. Boeing suggested that the paragraph state: "This AD was prompted by the report of a flight crew not receiving an aural warning during a lack of cabin pressurization event. The failure of the altitude pressure switch prevented the aural warning from sounding when the cabin altitude exceeded 10,000 feet. We are issuing this AD to improve reliability of the Cabin Altitude Warning to flight crews. Loss of the Cabin Altitude Warning may delay flight crew recognition of a lack of cabin pressurization, which could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane."

Boeing stated that the pressure switch at issue is only used in the cabin altitude warning system and is not used for pressurization control. Boeing stated that the increased reliability of the cabin altitude warning may prevent delays in the flightcrew's recognition of a lack of cabin pressure event, but will not affect the flightcrew's ability to recognize the warning intent or properly react because the method of annunciation and associated flightcrew procedures are unchanged. Boeing stated that AD 2011-03-14, Amendment 39-16598 (76 FR 6529, February 7, 2011), and NPRM Docket No.

FAA-2011-0258 (76 FR 16579, March 24, 2011) address the failure of a flightcrew to recognize and react to a valid cabin altitude warning.

We agree with Boeing's request. We agree that the requested revision clarifies that failure of the pressure switch was not the root cause of the lack of cabin pressurization, but was the root cause of the failure of the aural warning. We have changed the Summary and paragraph (e) of this final rule accordingly, with certain editorial changes.

#### **Request to Match Compliance Times of Two AD Actions**

United Airlines (UAL) requested that the effective date of the final rule after the NPRM (76 FR 82207, December 30, 2011) match the effective date of the final rule after NPRM for Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011). UAL pointed out that Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012; and Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; have been issued. UAL stated that the effective date of this final rule will require installation of the redundant pressure switch (which was proposed in the NPRM (76 FR 82207, December 30, 2011)), and should not precede the effective date of the final rule for NPRM Docket No. FAA-2011-0258, which currently proposes to require the installation of annunciators. UAL stated that matching the compliance times for the two final rules will allow operators to obtain parts and schedule the two modifications concurrently, which is much more effective than doing the two tasks at separate times, since the work is required in the same areas for both modifications.

We disagree with the commenter's request to harmonize the compliance times. While we note that the safety issues identified in this final rule and NPRM Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011) are related, each AD action addresses separate safety issues and has specific compliance times based on our risk assessments.

Operators can always comply with an AD in advance of the compliance time. We have not changed this AD in this regard.

### **Request to Revise the Costs of Compliance Section**

Boeing requested clarification of incorporation costs reflected in the NPRM as those costs relate to Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010; Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; and the supporting BAE service information.

DAL requested that the work-hours for Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011, to modify instrument panels, install light assemblies, modify wire bundles, and install a new circuit breaker, be changed from 84 to approximately 95. DAL stated that it has noted a discrepancy in the work-hours for the actions specified in the service information, excluding time estimates for opening and closing.

AAL requested that we revise the estimated work-hours for accomplishing the actions in the NPRM (76 FR 82207, December 30, 2011). AAL suggested that the work-hours specified in Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, be revised from 31 to approximately 95 work-hours for accomplishing the installation of the redundant cabin altitude pressure switch, removal and installation of the AWM, and wiring changes. AAL stated that it has validated its estimates through implementation on several airplanes. DAL requested the work-hours for the same action be adjusted to approximately 53.

UAL requested that the combined work-hours for both actions (we infer to this as installation and modification) be changed from 115 to 200 work-hours. UAL stated that it has done surveys of airplanes to determine how to gain access to affected areas, and it has determined what additional testing will be required due to disturbed systems.

Europe Airpost, DAL, US Airways, and UAL requested that we revise the cost of parts in the NPRM (76 FR 82207, December 30, 2011). Europe Airpost specifically stated that an additional cost should be included for operators needing to procure a new AWM (\$36,456 based on the Boeing service information), which is not negligible for small airlines. UAL stated that the price estimates specified in the service information and the NPRM only include wire kit costs and do not include the costs for modifying or replacing parts. US Airways indicated that the cost for reworking the AWM would be \$4,136, and the cost for replacement of the AWM would be \$33,576 (each).

We agree with the commenters' request to revise the work-hours and the cost of parts in this AD. We have revised the cost for the installation, replacement, and wiring changes to include the 54 work-hours in Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012, and the 8 hours in the concurrent BAE service information, a total of up to 62 work-hours. We have revised the cost of parts of the AWM to specify \$33,576. For the modification and other installations, we have included the 8 work-hours in the concurrent BAE service information, a total of up to 92 work-hours. We have revised the "Cost of Compliance" section of this AD accordingly.

**Request to Reopen the Comment Period for a Related NPRM (76 FR 16579, March 24, 2011)**

UAL requested that we revise and re-open the comment period for a related NPRM, Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011). UAL stated that the related NPRM is only applicable to airplanes in Groups 1 through 7 of Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010. UAL stated that it does not have any airplanes within these groups and, therefore, did not comment on that related NPRM. However, UAL stated that in paragraph (h) of the NPRM (76 FR 82207, December 30, 2011), the concurrent requirements identified in Boeing Alert Service

Bulletin 737-31A1332, Revision 2, dated August 18, 2011, now include 23 groups of airplanes. UAL stated that operators that have airplanes in groups 1 through 7 likely did not comment on the related NPRM, and should be given the opportunity to do so.

We are considering additional AD rulemaking at this time for the related NPRM, Docket No. FAA-2011-0258 (76 FR 16579, March 24, 2011), which will re-open the comment period.

#### **Request for Editorial Changes**

Boeing requested that we make editorial changes to the NPRM (76 FR 82207, December 30, 2011). Boeing suggested we delete the comma after "certain wire bundles," and add the word "or" so that the first sentence in paragraph (g) of the NPRM would read as follows: "Within 72 months after the effective date of this AD, install a redundant switch of the cabin altitude pressure, replace the aural warning module (AWM) with a new or reworked AWM, and change certain wire bundles or connect certain capped and stowed wires, as applicable ...." Boeing noted that certain airplanes require the replacement of the AWM and connection of the capped and stowed wires, as specified in Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012.

We agree with the commenter's request for editorial changes for the reason provided by the commenter. We have changed the Summary and paragraph (g) of this final rule accordingly.

#### **Revised AMOC Paragraph**

We have added paragraph (j)(3) to this final rule to delegate the authority to approve an AMOC for any repair required by this AD to the Boeing Commercial Airplanes Organization Designation Authorization (ODA).

## Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously – and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the (NPRM (76 FR 82207, December 30, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 82207, December 30, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

## Costs of Compliance

We estimate that this AD affects 1,405 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Install a redundant cabin altitude pressure switch, replace the AWM with a new or reworked AWM, change certain wire bundles or connect certain capped and stowed wires.	Up to 62 work-hours X \$85 per hour = up to \$5,270	\$33,576	Up to \$38,846	Up to \$54,578,630

Modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker (concurrent requirements).	Up to 92 work-hours X \$85 per hour = up to \$7,820	\$5,292	Up to \$13,112	Up to \$18,422,360
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### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2012-19-11 The Boeing Company:** Amendment 39-17206; Docket No. FAA-2011-1411; Directorate Identifier 2011-NM-074-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

The Boeing Company airplanes; certificated in any category; as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 737-100, -200, -200C, -300, - 400, and -500 series airplanes, as identified in Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012.

(2) Model 737-600, -700, -700C, -800, - 900, and -900ER series airplanes, as identified in Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 21; Air Conditioning.

**(e) Unsafe Condition**

This AD was prompted by the report of a flightcrew not receiving an aural warning during a lack of cabin pressurization event. The failure of the altitude pressure switch prevented the aural warning from sounding when the cabin altitude exceeded 10,000 feet. We are issuing this AD to prevent the loss of cabin altitude warning, which could delay flightcrew recognition of a lack of cabin pressurization, and could result in incapacitation of the flightcrew due to hypoxia (a lack of oxygen in the body), and consequent loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Installation**

Within 72 months after the effective date of this AD, install a redundant cabin altitude pressure switch, replace the aural warning module (AWM) with a new or reworked AWM, and change certain wire bundles or connect certain capped and stowed wires, as applicable, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012 (for

Model 737-100, -200, -200C, -300, -400, and -500 series airplanes); or Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010, as revised by Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes).

**(h) Concurrent Actions**

For airplanes identified in Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010 (for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes); and Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes): Before or concurrently with accomplishment of the actions specified in paragraph (g) of this AD, as applicable, modify the instrument panels, install light assemblies, modify the wire bundles, and install a new circuit breaker, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010 (for Model 737-100, -200, -200C, -300, -400, and -500 series airplanes); or Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012 (for Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes).

**(i) Credit for Previous Actions**

(1) This paragraph provides credit for the actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010.

(2) For Group 1 airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010; except Groups 24, 25, and 27 through 33 airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012: This paragraph provides credit for the corresponding actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this

AD, using Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010, which is not incorporated by reference.

(3) For airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; except airplanes identified in paragraph (i)(4) of this AD, and Groups 24, 25, and 27 through 33 airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012: This paragraph provides credit for the corresponding actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011.

(4) For Group 21, Configuration 2 airplanes identified in Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012: This paragraph provides credit for the corresponding actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011; and provided that those actions in Boeing Service Bulletin 737-21-1171, dated February 12, 2009, were accomplished prior to or concurrently with the actions in Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the Seattle ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

**(k) Related Information**

For more information about this AD, contact Francis Smith, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6596; fax: (425) 917-6590; email: [Francis.Smith@faa.gov](mailto:Francis.Smith@faa.gov).

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 737-21-1164, Revision 1, dated May 17, 2012.

(ii) Boeing Special Attention Service Bulletin 737-21-1165, Revision 1, dated July 16, 2010.

(iii) Boeing Special Attention Service Bulletin 737-21-1165, Revision 2, dated April 30, 2012.

(iv) Boeing Alert Service Bulletin 737-31A1325, dated January 11, 2010.

(v) Boeing Alert Service Bulletin 737-31A1332, Revision 1, dated June 24, 2010.

(vi) Boeing Alert Service Bulletin 737-31A1332, Revision 2, dated August 18, 2011.

(vii) Boeing Alert Service Bulletin 737-31A1332, Revision 3, dated March 28, 2012.

(3) For The Boeing Company service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on September 19, 2012.

Ali Bahrami,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-23800 Filed 10/02/2012 at 8:45 am; Publication Date: 10/03/2012]